

IN THE CLAIMS:

1.- 30. (Cancelled)

31. (New) A sensor arrangement comprising at least one sensor, at least one integrated signal processing circuit for the measurement of signals from the at least one sensor, and interconnecting wiring between the at least one sensor and the integrated circuit, the arrangement comprises a substrate, said substrate forming at least part of said interconnecting wiring and said substrate is further arranged to serve as a functional part of at least one said sensor, and wherein substrate comprises means for forming a sensor together with a sensor part, wherein said substrate and said sensor part are galvanically separated, and wherein said substrate and said sensor part comprise means for transferring energy and measurement information inductively between said substrate and said sensor part.
32. (New) An arrangement according to claim 31, wherein said sensor part is a passive circuit.
33. (New) An arrangement according to claim 31, wherein said sensor part comprises an active circuit further comprising means for measuring sensor information and means for transferring the measurement information inductively to said substrate.
34. (New) An arrangement according to claim 31, wherein said sensor is a skin contact sensor.
35. (New) An arrangement according to claim 31, wherein the arrangement further comprises a infrared light source, a infrared light detector and second measurement means for measuring absorption of infrared light from the finger.

36. (New) An arrangement according to claim 35, wherein said infrared light source and said infrared light detector are located at opposite sides of a groove designed for a finger.
37. (New) An arrangement according to claim 31, wherein said arrangement further comprises a temperature sensor for measuring ambient temperature.
38. (New) An arrangement according to claim 31, wherein said arrangement further comprises a humidity sensor for sensing ambient humidity.
39. (New) An arrangement according to claim 31, wherein said arrangement further comprises a pressure sensor.
40. (New) An arrangement according to claim 31, wherein said arrangement further comprises a skin contact sensor.
41. (New) An arrangement according to claim 31, wherein said arrangement further comprises a sensor fixed on the substrate.
42. (New) An arrangement according to claim 31, wherein said arrangement comprises a biometric sensor.
43. (New) A mobile terminal, wherein it includes a sensor arrangement according to claim 31.
44. (New) A mobile terminal according to claim 43, wherein at least part of the sensor arrangement is encapsulated, such as molded, in the cover of the mobile terminal.